

1

SEQUENCE LISTING

<110> Korea Advanced Institute of Science and Technology

5 <120> E coli Secreting Human
Granulocyte Colony Stimulating Factor (hG-CSF)

<130> P0132/KAIST/PCT

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<151> 2000-03-31

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Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln
20 25 30

Glu Lys Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu Val
5 35 40 45

Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser Cys
50 55 60

10 Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His Ser
65 70 75 80

Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile Ser
85 90 95

15 Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala Asp
100 105 110

Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala Pro
20 115 120 125

Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala Phe
130 135 140

25 Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser Phe
145 150 155 160

Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
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cccctgagca gctgccccag ccaggccctg cagctggcag gctgcttgc ccaactccat 240

10 agcggccttt tcctctacca ggggctcctg caggccctgg aaggatctc ccccgagttg 300

ggtcccacct tggacacact gcagctggac gtcgcccact ttgccaccac catctggcag 360

cagatggaag aactggaaat ggccctgccc ctgcagccca cccagggtgc catgccggcc 420

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20 25 30

Gln Glu Lys Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu

35 40 45

35

Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser

11

50

55

60

Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His
65 70 75 80

5

Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile
85 90 95

Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala
10 100 105 110

Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala
115 120 125

15 Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala
130 135 140

Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser
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20

Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
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Met Phe Lys Phe Lys Lys Phe Leu Val Gly Leu Thr Ala Ala Phe

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20 25 30

Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys Cys

35 40 45

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1 5 10 15Met Ser Ile Ser Met Phe Ser Ala Thr Ala Ser Ala Ala Gly Pro His
20 25 30

25

His His His His Ile Glu Gly Arg Thr Pro Leu Gly Pro Ala Ser
35 40 45Ser Leu Pro Gln Ser Phe Leu Leu Lys Cys Leu Glu
30 50 55 60